

**DETAILED ACTION**

***Election/Restrictions***

1. This application is in condition for allowance except for the presence of claims 2-6 directed to Groups II-VI non-elected without traverse. Accordingly, claims 2-6 have been cancelled.

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Pedro Fernandez on 8/25/2010.

The application has been amended as follows:

In the claims:

Claims 2-6 are cancelled.

Claim 11, line 2, change "the shorter the interval" to --the shorter an interval--.

Claim 12, line 2, change "said deviation" to --the shorter an interval said deviation--.

**REASONS FOR ALLOWANCE**

3. Claims 1, 8-12, 15-22 allowed.

4. The following is an examiner's statement of reasons for allowance: The prior art of record fails to expressly disclose an adaptive control unit which updates an compensation vector on the basis of an adaptive algorithm to minimize an expectation value of a product of an inner product between an increment vector indicating an increment of said deviation with different sample times in chronological order and the compensation vector, and a latest deviation vector indicating the deviation, and which adds the updated compensation vector to an offset vector to be inputted while being superposed on said input signal, to a circuit to output said vector sum. Such an adaptive control unit distinguishes the claims over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID HUANG whose telephone number is (571)270-1798. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on (571) 272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DSH/dsh  
8/25/10  
/David Huang/  
Examiner, Art Unit 2611  
/Shuwang Liu/  
Supervisory Patent Examiner, Art Unit 2611